



Attorney Docket No.: 4341P053D2

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patent Application of:

Scott Adams, et al.

Application No.: 10/766,720

Filed: January 27, 2004

For: ELECTROSTATIC ACTUATOR  
FOR MICROELECTROMECHANICAL  
SYSTEMS AND METHODS OF  
FABRICATION

Examiner: Tamai, Karl I.

Art Unit: 2834

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

EXPRESS MAIL STATEMENT

"Express Mail" mailing label number: EV56749109245  
Date of Deposit: NOVEMBER 10, 2005

I hereby state that I am causing this paper or fee to be deposited with the United States Postal Service "Express Mail Post Office to Addressee" service on the date indicated above and that this paper or fee has been addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Cathy A. Kerr

(Type or printed name of person mailing paper or fee)

Cathy A. Kerr

(Signature of person mailing paper or fee)

NOVEMBER 10, 2005

(Date Signed)

INFORMATION DISCLOSURE STATEMENT

Sir:

Enclosed is a copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 together with copies of the documents cited on that form, except for copies not required to be submitted (e.g., copies of U.S. patents and U.S. published patent applications need not be enclosed). It is respectfully requested that the cited documents be considered and that the enclosed copy of Information Disclosure Citation Form PTO-1449 or PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s).

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

Pursuant to 37 C.F.R. § 1.97, this Information Disclosure Statement is being submitted under one of the following (as indicated by an "X" to the left of the appropriate paragraph):

XXX 37 C.F.R. §1.97(b).

\_\_\_\_\_ 37 C.F.R. §1.97(c). If so, then enclosed with this Information Disclosure Statement is one of the following:

\_\_\_\_\_ A statement pursuant to 37 C.F.R. §1.97(e) or

\_\_\_\_\_ A check for \$180.00 for the fee under 37 C.F.R. § 1.17(p).

\_\_\_\_\_ 37 C.F.R. §1.97(d). If so, then enclosed with this Information Disclosure Statement are the following:

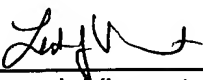
- (1) A statement pursuant to 37 C.F.R. §1.97(e); and
- (2) A check for \$180.00 for the fee under 37 C.F.R. §1.17(p) for submission of the Information Disclosure Statement.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: November 10, 2005

  
\_\_\_\_\_  
Lester J. Vincent  
Reg. No. 31,460

12400 Wilshire Boulevard  
Seventh Floor  
Los Angeles, California 90025  
(403) 720-8300

Substitute for Form 1449/PTO

## INFORMATION DISCLOSURE

## STATEMENT BY APPLICANT

(use as many sheets as necessary)



Sheet 1 of 14 Attorney Docket Number 4341P053D2

## Complete if Known

Application Number 10/766,720  
 Filing Date January 27, 2004  
 First Named Inventor: Scott Adams  
 Art Unit 2834  
 Examiner Name Tamai, Karl I.  
 Attorney Docket Number 4341P053D2

## U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		US-	3,493,820	2/3/1970	Rosvold	
		US-	4,104,086	8/1/1978	Bondur et al.	
		US-	4,421,381	12/20/1983	Ueda et al.	
		US-	4,509,249	4/9/1985	Goto et al.	
		US-	4,519,128	5/28/1985	Chesebro et al.	
		US-	4,553,436	11/19/1985	Hansson	
		US-	4,571,819	2/25/1986	Rogers et al.	
		US-	4,613,203	9/23/1986	Proetel et al.	
		US-	4,670,092	6/2/1987	Motamedi	
		US-	4,688,069	8/18/1987	Joy et al.	
		US-	4,706,374	11/17/1987	Murakami	
		US-	4,738,500	4/19/1988	Grupp et al.	
		US-	4,784,720	11/15/1988	Douglas	
		US-	4,855,017	8/8/1989	Douglas	
		US-	4,876,217	10/24/1989	Zdebel	

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		DE	19757171 A1	7/1/1999	Bosch		
		DE	19800745 A1	7/15/1999	Bosch		
		EP	0 813 089 A2	12/17/1997	Choi et al.		
		EP	0 834759 A2	4/8/1998	Dhuler, et al.		
		EP	0 980014 A1	2/16/2000	Meier, et al.		

Examiner Signature

Date Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

<b>Substitute for Form 1449/PTO</b> <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/766,720
				Filing Date	January 27, 2004
				First Named Inventor:	Scott Adams
				Art Unit	2834
				Examiner Name	Tamai, Karl I.
Sheet	2	of	14	Attorney Docket Number	4341P053D2

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 5,068,203	11/26/1991	Logsdon et al.	
		US- 5,083,857	1/28/1992	Hornbeck	
		US- 5,097,354	3/17/1992	Goto	
		US- 5,172,262	12/15/1992	Hornbeck	
		US- 5,198,390	3/30/1993	MacDonald et al.	
		US- 5,203,208	4/20/1993	Bernstein	
		US- 5,226,321	7/13/1993	Varnham et al.	
		US- 5,235,187	8/10/1993	Arney et al.	
		US- 5,316,979	5/31/1994	MacDonald et al.	
		US- 5,345,824	9/13/1994	Sherman et al.	
		US- 5,391,236	2/21/1995	Krut et al.	
		US- 5,393,375	2/28/1995	MacDonald et al.	
		US- 5,397,904	3/14/1995	Arney et al.	
		US- 5,399,415	3/21/1995	Chen et al.	
		US- 5,426,070	6/20/1995	Shaw et al.	

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		EP 1 120677 A2	8/1/2001	Wood et al.		
		GB 2 175 705 A	12/3/1986	Greenwood et al.		
		GB 2 239 101 A	6/19/1991	Rowe		
		JP 60-107017	6/12/1985	Tanabe et al.		
		JP 4-343318 A	11/30/1992	Nakagawa et al.		

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

**SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Substitute for Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/766,720
Filing Date	January 27, 2004
First Named Inventor:	Scott Adams
Art Unit	2834
Examiner Name	Tamai, Karl I.
Attorney Docket Number	4341P053D2

Sheet	3	of	14
-------	---	----	----

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		US-	5,427,975	6/27/1995	Sparks et al.	
		US-	5,428,259	6/27/1995	Suzuki	
		US-	5,449,903	9/12/1995	Arney et al.	
		US-	5,454,906	10/3/1995	Baker et al.	
		US-	5,463,246	10/31/1995	Matsunami	
		US-	5,485,039	1/16/1996	Fujita et al.	
		US-	5,488,862	2/6/1996	Neukermans et al.	
		US-	5,501,893	3/26/1996	Laermer et al.	
		US-	5,506,175	4/9/1996	Zhang et al.	
		US-	5,536,988	7/16/1996	Zhang et al.	
		US-	5,554,304	9/10/1996	Suzuki	
		US-	5,563,343	10/8/1996	Shaw et al.	
		US-	5,599,744	2/4/1997	Koh et al.	
		US-	5,600,383	2/4/1997	Hornbeck	
		US-	5,608,264	3/4/1997	Gaul	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
			JP 5-107485 A		4/30/1993	Koyabu et al.		
			JP 6-180428		6/28/1994	Toyoda et al.		
			JP 5-55401 A					
			WO 94/18697		8/18/1994	Shaw et al.		
			WO 97/04283		2/6/1997	Miller et al.		

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/766,720
Filing Date	January 27, 2004
First Named Inventor:	Scott Adams
Art Unit	2834
Examiner Name	Tamai, Karl I.
Attorney Docket Number	4341P053D2

Sheet	4	of	14
-------	---	----	----

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		US-	5,610,335	3/11/1997	Shaw et al.	
		US-	5,611,888	3/18/1997	Bosch et al.	
		US-	5,611,940	3/18/1997	Zettler	
		US-	5,628,917	5/13/1997	MacDonald et al.	
		US-	5,629,790	5/13/1997	Neukermans et al.	
		US-	5,637,189	6/10/1997	Peeters et al.	
		US-	5,642,015	6/24/1997	Whitehead et al.	
		US-	5,645,684	7/8/1997	Keller	
		US-	5,646,067	7/8/1997	Gaul	
		US-	5,648,618	7/15/1997	Neukermans et al.	
		US-	5,673,139	9/30/1997	Johnson	
		US-	5,682,062	10/28/1997	Gaul	
		US-	5,696,619	12/9/1997	Knipe et al.	
		US-	5,703,728	12/30/1997	Smith et al.	
		US-	5,719,073	2/17/1998	Shaw et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
			WO 99/36941		7/22/1999	Adams et al.		
			WO 99/36948		7/22/1999	Adams et al.		
			WO 99/67666		12/29/1999	Laor		
			WO 01/33898 A2		5/10/2001	Ramaswami et al.		
			WO 01/39413 A2		5/31/2001	Ramaswami et al.		

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/766,720
Filing Date	January 27, 2004
First Named Inventor:	Scott Adams
Art Unit	2834
Examiner Name	Tamai, Karl I.
Attorney Docket Number	4341P053D2

Sheet	5	of	14
-------	---	----	----

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)				
		US-	5,726,073	3/10/1998	Zhang et al.	
		US-	5,759,913	6/2/1998	Fulford, Jr. et al.	
		US-	5,770,465	6/23/1998	MacDonald et al.	
		US-	5,784,187	7/21/1998	Cunningham et al.	
		US-	5,798,557	8/25/1998	Salatino et al.	
		US-	5,804,084	9/8/1998	Nasby et al.	
		US-	5,814,889	9/29/1998	Gaul	
		US-	5,846,849	12/8/1998	Shaw et al.	
		US-	5,847,454	12/8/1998	Shaw et al.	
		US-	5,853,959	12/29/1998	Brand et al.	
		US-	5,912,094	6/15/1999	Aksyuk et al.	
		US-	5,912,608	6/15/1999	Asada	
		US-	5,915,168	6/22/1999	Salatino et al.	
		US-	5,920,417	7/6/1999	Johnson	
		US-	5,933,746	8/3/1999	Begley et al.	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		WO	01/57902 A2	8/9/2001	Adams et al.		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/766,720
Filing Date	January 27, 2004
First Named Inventor:	Scott Adams
Art Unit	2834
Examiner Name	Tamai, Karl I.
Attorney Docket Number	4341P053D2

Sheet	6	of	14
-------	---	----	----

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		US-	5,969,848	10/19/1999	Lee et al.	
		US-	5,973,396	10/26/1999	Farnworth	
		US-	5,998,816	12/7/1999	Nakaki et al.	
		US-	5,998,906	12/7/1999	Jerman et al.	
		US-	5,999,303	12/7/1999	Drake	
		US-	6,000,280	12/14/1999	Miller et al.	
		US-	6,020,272	2/1/2000	Fleming	
		US-	6,028,689	2/22/2000	Michalicek et al.	
		US-	6,040,935	3/21/2000	Michalicek	
		US-	6,044,705	4/4/2000	Nuekermans et al.	
		US-	6,066,265	5/23/2000	Galvin et al.	
		US-	6,072,617	6/6/2000	Henck	
		US-	6,075,639	6/13/2000	Kino et al.	
		US-	6,078,016	6/20/2000	Yoshikawa et al.	
		US-	6,097,858	8/1/2000	Laor	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.  
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Substitute for Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/766,720
Filing Date	January 27, 2004
First Named Inventor:	Scott Adams
Art Unit	2834
Examiner Name	Tamai, Karl I.
Attorney Docket Number	4341P053D2

Sheet	7	of	14
-------	---	----	----

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		US-	6,097,859	8/1/2000	Solgaard et al.	
		US-	6,097,860	8/1/2000	Laor	
		US-	6,101,299	8/8/2000	Laor	
		US-	6,107,109	8/22/2000	Akram et al.	
		US-	6,107,115	8/22/2000	Atobe et al.	
		US-	6,121,552	9/19/2000	Brosnihan et al.	
		US-	6,128,121	10/3/2000	Choi et al.	
		US-	6,146,248	11/14/2000	Jairath et al.	
		US-	6,149,190	11/21/2000	Galvin et al.	
		US-	6,170,332 B1	1/9/2001	MacDonald et al.	
		US-	6,180,536 B1	1/30/2001	Chong et al.	
		US-	6,199,874 B1	3/13/2001	Galvin et al.	
		US-	6,201,629 B1	3/13/2001	McClelland et al.	
		US-	6,201,631 B1	3/13/2001	Greywall	
		US-	6,220,561 B1	4/24/2001	Garcia	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.  
SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Substitute for Form 1449/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/766,720
Filing Date	January 27, 2004
First Named Inventor:	Scott Adams
Art Unit	2834
Examiner Name	Tamai, Karl I.
Attorney Docket Number	4341P053D2

Sheet	8	of	14
-------	---	----	----

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		US-	6,239,473 B1	5/29/2001	Adams et al.	
		US-	6,245,590 B1	6/12/2001	Wine et al.	
		US-	6,253,001 B1	6/26/2001	Hoen	
		US-	6,262,827 B1	7/17/2001	Ueda et al.	
		US-	6,285,490 B1	9/4/2001	Meier et al.	
		US-	6,295,154 B1	9/25/2001	Laor et al.	
		US-	6,300,665 B1	10/9/2001	Peeters et al.	
		US-	6,323,982 B1	11/27/2001	Hornbeck	
		US-	6,329,738 B1	12/11/2001	Hung et al.	
		US-	6,330,102 B1	12/11/2001	Daneman et al.	
		US-	6,337,760 B1	1/8/2002	Huibers et al.	
		US-	6,342,430 B1	1/29/2002	Adams et al.	
		US-	6,353,492 B2	3/5/2002	McClelland et al.	
		US-	6,368,881 B1	4/9/2002	Brouillette et al.	
		US-	6,404,313 B2	6/11/2002	Asada	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

<b>Substitute for Form 1449/PTO</b> <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>		
				Application Number	10/766,720	
				Filing Date	January 27, 2004	
				First Named Inventor:	Scott Adams	
				Art Unit	2834	
Examiner Name	Tamai, Karl I.					
Sheet	9	of	14	Attorney Docket Number	4341P053D2	

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)				
		us-	6,444,138 B1	9/3/2002	Moon et al.	
		us-	6,458,615 B1	10/1/2002	Fedder et al.	
		us-	6,462,391 B1	10/8/2002	Chong et al.	
		us-	6,464,892 B2	10/15/2002	Moon et al.	
		us-	6,467,345 B1	10/22/2002	Neukermans et al.	
		us-	6,483,961 B1	11/19/2002	Helkey et al.	
		us-	6,538,799 B2	3/25/2003	McClelland et al.	
		us-	6,552,840 B2	4/22/2003	Knipe	
		us-	6,560,384 B1	5/6/2003	Helkey et al.	
		us-	6,563,106 B1	5/13/2003	Bowers et al.	
		us-	6,626,039 B1	9/30/2003	Adams et al.	
		us-	6,628,041 B2	9/30/2003	Lee et al.	
		us-	6,643,425 B1	11/4/2003	Bowers et al.	
		us-	6,668,108 B1	12/23/2003	Helkey et al.	
		us-	6,706,200 B2	3/16/2004	Moon et al.	

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

**SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Substitute for Form 1449/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/766,720
				Filing Date	January 27, 2004
				First Named Inventor:	Scott Adams
				Art Unit	2834
Examiner Name	Tamai, Karl I.				
Sheet	10	of	14	Attorney Docket Number	4341P053D2

### U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)				
		US-	6,756,247 B1	6/29/2004	Davis et al.	
		US-	US 2001/0044165 A1	11/22/2001	Lee et al.	
		US-	US 2002/0039464 A1	4/4/2002	Yoshimura et al.	
		US-	US-2002/0071171 A1	6/13/2002	Greywall	
		US-	US-2002/0093721 A1	7/18/2002	Knipe	
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				
		US-				

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				

Examiner Signature		Date Considered	
-----------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS.

SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

<b>Substitute for Form 1449/PTO</b> <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/766,720
				Filing Date	January 27, 2004
				First Named Inventor:	Scott Adams
				Art Unit	2834
				Examiner Name	Tamai, Karl I.
Sheet	11	of	14	Attorney Docket Number	4341P053D2
<b>NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>2</sup>
		Timothy J. Broshnihan, James M. Bustillo, Albert P. Pisano & Roger T. Howe, "Embedded Interconnect & Electrical Isolation for High-Aspect-Ratio, SOI Inertial Instruments," Berkeley Sensor & Actuator Sensor, pp. 637-640, Transducers '97, 1997 International Conference on Solid-State Sensors and Actuators (Chicago, June 16-19, 1997)			
		Janusz Bryzek, Kurt Petersen, & Wendell McCulley, "Micromachines on the March," IEEE Spectrum, pp. 20-31 (May 1994)			
		Wolfgang Kuehnelt and Steven Sherman, "A Surface Micromachined Silicon Accelerometer with On-Chip Detection Circuitry," Sensors and Actuators A 45, pp. 7-16 (1994)			
		Howard K. Rockstad, et al., "A Miniature High-Sensitivity Broadband Accelerometer Based on Electron Tunneling Transducers," Sensors and Actuators A 43, pp. 107-114 (1994)			
		Lynn Michelle Roylance and James B. Angell, "A Batch-Fabricated Silicon Accelerometer," IEEE Transactions on Electron Devices, Vol. Ed-26, No. 12, pp. 1911-1917 (December 1979)			
		Kevin A. Shaw, et al., "SCREAM I: A Single Mask, Single-Crystal Silicon, Reactive Ion Etching Process for Microelectromechanical Structures," Sensors and Actuators A, 40 pp. 63-70 (1994)			
		Toshiki Hirano, et al., "Design, Fabrication, and Operation of Submicron Gap Comb-Drive Microactuators," J. of Microelectromechanical Systems, Vol. 1, No. 1, pp. 52-59, (March 1992)			
		V.P. Jaecklin. et al., "Comb Actuators for XY-Microstages," Sensors and Actuators, A, 39, pp. 83-89 (1993)			
		Susanne C. Arney and Noel C. MacDonald, et al., "Formation of Submicron Silicon-On-Insulator Structures by Lateral Oxidation of Substrate-Silicon Islands," J. Vac. Sci. Technol. B Vol. 6 No. 1, pp. 341-345, (Jan/Feb 1988)			
		<u>"Lucent's New All-Optical Router Uses Bell Labs Microscopic Mirrors," Bells Labs press release, pp. 1-4, November 10, 1999. <a href="http://www.bell-labs.com/news/1999/november/10/1.html">http://www.bell-labs.com/news/1999/november/10/1.html</a></u>			
		Rudolf F. Graf, Radio Shack Dictionary of Electronics, p. 639, Definition of Varible Capacitor with Picture (1974)			

Examiner Signature	Date Considered
--------------------	-----------------

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

<b>Substitute for Form 1449/PTO</b>  <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/766,720
				Filing Date	January 27, 2004
				First Named Inventor:	Scott Adams
				Art Unit	2834
				Examiner Name	Tamai, Karl I.
Sheet	12	of	14	Attorney Docket Number	4341P053D2
<b>NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>2</sup>
		M. Adrian Michalicek, Wenge Zhang, Kevin F. Harsh, Victor M. Bright, and Y.C. Lee, "Micromirror Arrays Fabricated by Flip-Chip Assembly," Part of the SPIE Conference on Miniaturizes Systems with Micro-Optics and MEMs, Santa Clara, SPIE Vol. 3878, pp. 68-79 (September 1999)			
		Chris Seung-Bok Lee, Sejin Han, Noel C. MacDonald, "Multiple Depth, Single Crystal Silicon MicroActuators for Large Displacement Fabricated by Deep Reactive Ion Etching," Solid-State Sensor and Actuator Workshop, Hilton Head Island, SC, pp. 45-50 (June 8-11, 1998)			
		Russell Y. Webb, Scott G. Adams, and Noel C. MacDonald, "Suspended Thermal Oxide Trench Isolation for SCS MEMS." SPIE Vol. 3519, Boston, MA, pp. 196-199 (November 1998)			
		Seung Chris B. Lee, "Two-Depth, Single Crystal Silicon Microelectromechanical Systems." A Dissertation Presented to the Faculty of the Graduate School of Cornell University in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy, (January 2000)			
		Leslie A. Field, Diane L. Burriesci, Peter R. Robrish, and Richard C. Ruby, "Micromachined 1 X 2 Optical-Fiber Switch," Sensors and Actuators A, 53, pp. 311-315, (1996)			
		Larry J. Hornbeck, "Digital Light Processing for High-Brightness, High-Resolution Applications," SPIE Vol. 3013, San Jose, CA, pp. 27-40 (February 1997)			
		Noel C. MacDonald, "SCREAM MicroElectroMechanical Systems." Microelectronic Engineering, 32, pp. 49-73 (1996)			
		Ming C. Wu, "MEMS for Optical and RF Applications." UCLA Extension, Department of Engineering, Information Systems and Technical Management, Engineering: 823.52, November 1-3, 1999.			
		Wolfgang Hofmann, Chris S. Lee, and Noel C. MacDonald, "Monolithic Three-Dimensional Single-Crystal Silicon Microelectromechanical Systems, Sensors and Materials, Vol. 10, No. 6, pp. 337-350 (1998)			
		William C. Tang, Martin G. Lim, and Roger T. Howe, "Electrostatic Comb Drive Levitation and Control Method" Journal of Microelectromechanical Systems, Vol. 1, No. 4, pp. 170-178 (December 1992)			
		M.C. Wu, L.-Y Lin, S.-S. Lee, and K.S.J. Pister, "Micromachined Free-Space Integrated Micro-Optics," Sensors and Actuators A, 50, pp. 127-134 (1995)			

Examiner Signature	Date Considered	
--------------------	-----------------	--

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.  
If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

<b>Substitute for Form 1449/PTO</b>  <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/766,720
				Filing Date	January 27, 2004
				First Named Inventor:	Scott Adams
				Art Unit	2834
				Examiner Name	Tamai, Karl I.
Sheet	13	of	14	Attorney Docket Number	4341P053D2
<b>NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>2</sup>
		Joseph E. Ford, Vladimir A. Aksyuk, David J. Bishop, and James A. Walker, "Wavelength Add-Drop Switching Using Tilting Micromirrors," Journal of Lightwave Technology, Vol. 17, No. 5, pp. 904-911 (May 1999)			
		D.T. Neilson, V.A. Aksyuk, S. Arney, N.R. Basavanahally, K.S. Bhalla, D.J. Bishop, B.A. Boie, C.A. Bolle, J.V. Gates, A.M. Gottlieb, J.P. Hickey, N.A. Jackman, P.R. Kolodner, S.K. Korotky, B. Mikkelsen, F. Pardo, G. Raybon, R. Ruel, R.E. Scotti, T.W. Van Blarcum, L. Zhang, and C.R. Giles, "Fully Provisional 112 x 112 Micro-Mechanical Optical Crossconnect With 35.8Tb/s Demonstrated Capacity," OFC 2000 Tech. Dig., Baltimore, Maryland, pp. 202-204 (March 7-10, 2000)			
		Robert E. Mihailovich, Z. L. Zhang, K. A. Shaw, and Noel C. MacDonald, "Single-Crystal Silicon Torsional Resonators." School of Electrical Engineering, Cornell University, Ithaca, NY 14853, pp. 184-188, IEEE (February 1993).			
		M.T.A. Salf and N. C. MacDonald, "Planarity of Large MEMS," Journal of Microelectromechanical Systems," 5, 79-97 (1996)			
		W.-H. Juan and S.W. Pang, "High-aspect-ratio Si Vertical Micromirror Arrays for Optical Switching," Journal of MicroElectroMechanical Systems, 7, 207, -213 (1998)			
		U.Gosele, et al., "Wafer Bonding for Microsystems Technologies," Sensors and Actuators A, Vol. 74, pp. 161-168 (1999)			
		Rob Legtenberg, et al., "Comb-drive actuators for large displacements," Journal of Micromechaniss and Microengineering, Vol. 6, No. 2, pp.320-329, June 1996			
		Ronald E. Scotti et al., "The Challenges of Packaging MEMS Components for the All Optical Network of the Future," Design, Test, Integration, and Packaging of MEMS/MOEMS 2001, Volume 4408, pp. 19-27 (April 25-27, 2001)			
		Chris S.B. Lee, Sejin Han, and Noel C. MacDonald, "Single Crystal Silicon (SCS) XY-Stage Fabricated by DRIE and IR alignment," MEMS 2000: The Thirteenth Annual International Conference on Micro Electro Mechanical Systems, pp. 28-33 (January 23-27, 2000)			
		Chris S.B. Lee, Russell Y. Webb, John M. Chong, and Noel C. MacDonald, "Single Crystal Silicon (SCS) MicroMirror Arrays using Deep Silicon Etching and IR Alignment," MEMS 2000: The Thirteenth Annual International Conference on Micro Electro Mechanical Systems, pp. 441-448 (January 23-27, 2000)			
		A. Azzam Yasseen, Joseph N. Mitchell, James F. Klemic, David A. Smith, and Mehran Mehregany, "A Rotary Electrostatic Micromotor 1 X 8 Optical Switch," IEEE Journal of Selected Topics in Quantum Electronics, Vol. 5, No. 1, pp. 26-31 (January/February 1999)			

Examiner Signature	Date Considered
--------------------	-----------------

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.  
This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



<b>Substitute for Form 1449/PTO</b> <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/766,720
				Filing Date	January 27, 2004
				First Named Inventor:	Scott Adams
				Art Unit	2834
				Examiner Name	Tamai, Karl I.
Sheet	14	of	14	Attorney Docket Number	4341P053D2
<b>NON PATENT LITERATURE DOCUMENTS</b>					
Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>2</sup>
		G. K. Fedder, S. Santhanam, M. L. Reed, S. C. Eagle, D. F. Guillou, M. S.-C. Lu, and L. R. Carley, "Laminated High-Aspect-Ratio Microstructures In A Conventional CMOS Process," Proceedings of the IEEE Micro Electro Mechanical Systems Workshop, San Diego, CA, pp. 13-18 (February 1996)			
		PCT Notification of Transmittal of The International Search Report or The Declaration for PCT Counterpart Application No. PCT/US01/03760 Containing International Search Report (September 5, 2001)			
		PCT Notification of Transmittal of International Preliminary Examination Report for PCT Counterpart Application No. PCT/US01/03760, 5 pgs. (January 29, 2002)			

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SENT FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Based on Form PTO/SB/08B (08-03) as modified by BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP on 09/10/03.



**Summary of USPTO Kind Codes Used on Documents Published Beginning January 2, 2001**

<b>WIPO ST.16 Kind Codes</b>	<b>Kind of document</b>	<b>Comments</b>
A1	Patent Application Publication	Pre-grant publication available March 2001
A2	Patent Application Publication (Republication)	Pre-grant publication available March 2001
A9	Patent Application Publication (Corrected Publication)	Pre-grant publication available March 2001
B1	Patent	No previously published pre-grant publication
B2	Patent	Having a previously published pre-grant publication and available March 2001
C1, C2, C3...	Reexamination Certificate	Previously used codes B1 and B2 are now used for granted Patents
E	Reissue Patent	No change
H	Statutory Invention Registration (SIR)	No change
P1	Plant Patent Application Publication	Pre-grant publication available March 2001
P2	Plant Patent	No previously published pre-grant publication
P3	Plant Patent	Having a previously published pre-grant publication and available March 2001
P4	Plant Patent Application Publication (Republication)	Pre-grant publication available after March 2001
P9	Plant Patent Application Publication (Corrected Publication)	Pre-grant publication available March 2001
S	Design Patent	No change